

Uncertainty-Absurdity Mutuality

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“Kingfisher inquired further: – How can one steady the mind?

Monk Bird answered: – To calm your mind, you must practice meditation to the extent that even the Eight Winds cannot sway you.

[...]

– The Eight Winds are eight worldly desires that stir emotions of love and hate. They arouse in you a craving for four things: Prosperity, Honor, Praise, Pleasure, and a fear of four others: Decline, Disgrace, Censure, and Suffering. When you meditate to the point where the Eight Winds no longer disturb your mind, confusion will vanish, and your wisdom will shine like the full moon.”

In “Meditation Master;” *Wild Wise Weird* (2024)

Abstract

Human cognition strives for coherence and meaning, yet it operates within a reality marked by ontological indeterminacy and epistemic incompleteness. This tension gives rise to two fundamental conditions: uncertainty and absurdity. *Wild Wise Weird* is a philosophical work that explores the dynamic link between these conditions through narrative storytelling. Using Granular Interaction Thinking Theory (GITT) and Bayesian Mindsponge Framework analytics, we conduct a quantitative philosophical analysis of 48 stories in *Wild Wise Weird* to examine its propositions concerning uncertainty and absurdity. Bayesian logistic models indicate that complete uncertainty and small absurdity reliably predict big absurdity. Moreover, modes of misinformation production—particularly lying and speculation—strengthen the association between complete uncertainty and big absurdity. The findings support an uncertainty–absurdity spiral in which partial uncertainty contributes to small absurdity, small absurdity increases vulnerability to complete uncertainty, and complete uncertainty culminates in large-scale absurdity. The study further discusses how this spiral may be avoided through Daoist and Kingfisherish perspectives, which emphasize adaptive recalibration grounded in humility, compassion, and the cultivation of Nature Quotient. In an era characterized by digital misinformation, ecological instability, and political polarization, understanding the structural interplay between uncertainty and absurdity offers both philosophical insight and practical guidance for managing cognitive and social entropy.

Keywords: uncertainty; absurdity; Heisenberg Uncertainty Principle; Incompleteness Theorems; *Nanhuajing*; BMF analytics; GITT-VT analytical framework; informational entropy; misinformation; Daoist philosophy; Kingfisherish philosophy

Introduction

The architecture of reality appears to be grounded in a fundamental paradox. Human cognition is biologically and evolutionarily oriented toward seeking causality, coherence, and purpose, yet it operates within a universe characterized by irreducible uncertainty (Afiki & Bar, 2020; Gärdenfors, 2021; Heyes, 2012). This tension gives rise to two persistent conditions that shape human understanding: uncertainty and absurdity. Uncertainty reflects the limits of prediction and control, while absurdity reflects the limits of meaning itself. Together, they mark the structural boundary between what can be known, what can be expected, and what can be justified.

At the physical level, uncertainty is not merely a shortage of human measurement but an ontological feature of reality. The Heisenberg Uncertainty Principle demonstrates that certain pairs of physical properties cannot be simultaneously determined with arbitrary

precision (Heisenberg, 1927, 1989). The more accurately one property is known, the more indeterminate the other becomes. This indeterminacy is not a temporary epistemic gap but a constitutive property of matter itself. This physical insight finds a philosophical counterpart in the concept of absurdity. If uncertainty represents the challenge of objective predictability, absurdity represents the challenge of objective meaning. As articulated by Albert Camus, absurdity emerges from the “divorce” between the human demand for intelligibility and a world that offers no intrinsic guarantees of purpose or moral order (Camus, 2013). The problem is not that meaning is hidden and awaiting discovery, but that the structure of reality itself does not conform to the mind’s expectations of complete coherence.

Crucially, this paradox is not confined to physics or existential reflection, but is also formalized in Kurt Gödel’s Incompleteness Theorems (Gödel, 1931). Gödel demonstrated that within any sufficiently powerful formal system, there exist true statements that cannot be proven using the system’s own axioms. This result decisively undermines the aspiration that reality can be rendered fully intelligible through internally complete and self-sufficient systems of reason. Even in mathematics—the domain most resistant to ambiguity—completeness and consistency cannot coexist. Knowledge, therefore, is not bounded merely by ignorance or technical insufficiency, but also by logical necessity (Hofstadter, 1999).

Gödel’s insight extends the logic of uncertainty from the physical domain into the epistemic one. Just as quantum mechanics reveals indeterminacy at the foundation of matter, incompleteness reveals indeterminacy, or uncertainty, at the foundation of meaning-making systems. No scientific, mathematical, moral, or metaphysical framework can fully account for itself without invoking principles that lie beyond its own explanatory reach. This structural gap is not an anomaly to be eliminated, but a permanent feature of complex systems that aspire to complete coherence. Absurdity, in this light, is not a psychological aberration but an objective condition arising whenever finite cognitive systems seek infinite justification.

Long before these ideas were formalized in modern physics and logic, similar insights were articulated in Daoist philosophy—most notably in Zhuangzi’s *Nanhuajing* (Laozi, 1868; Zhuang Zhou, 1964). For Zhuangzi, uncertainty is an inescapable feature of human existence, arising from the attempt of finite perception to grasp the boundless vastness of the Dao, the natural processes of the universe. Human knowledge is inherently “infinitesimal” when measured against the “infinite,” and attempts to impose rigid distinctions—such as right versus wrong, useful versus useless, life versus death—only deepen misalignment with reality. Through paradox, irony, and narrative inversion, Zhuangzi dissolves these binaries, earning his reputation as the “sage of uncertainty.” Rather than

resolving uncertainty, his philosophy teaches how to find alignment with it without illusion (Nguyen, Ho, & La, 2025).

A comparable worldview is expressed in Kingfisherish philosophy, most prominently articulated through *Wild Wise Weird* by Professor Quan-Hoang Vuong (Vuong, 2024). While emerging from a contemporary intellectual context, Kingfisherish thought resonates strongly with Daoist monism and uncertainty, while extending these insights through an explicit focus on absurdity (Nguyen, 2025a).

Central to this perspective is the recognition that value, meaning, and correctness are not fixed properties of objects or actions, but emergent outcomes of dynamic interactions between internal cognition and contextual conditions. What appears beneficial, rational, or virtuous under one informational configuration may abruptly become harmful, irrational, or unjustifiable under another. Such abrupt reversals expose forms of absurd reasoning that ordinarily remain concealed beneath stabilized beliefs, values, and informational structures. By bringing these hidden cognitive constraints into awareness, the stories in *Wild Wise Weird* function as an absurdist method of ontological and epistemological inquiry. They do not ridicule reason itself, but rather reveal the fragility of certainty when information is incomplete, selectively filtered, or misaligned with reality. In doing so, they gently encourage readers to move beyond greed, desire, and binary judgment, cultivating a return to a more fluid, primordial alignment with the Dao (Nguyen, 2025a).

In this context, the present study adopts a quantitative philosophy approach using the GITT–VT analytical framework to examine how uncertainty and absurdity are structurally linked across 48 stories in *Wild Wise Weird*. This work is particularly suitable for such analysis for several main reasons. First, it explicitly centers the interplay between uncertainty and absurdity. Second, its self-contained short stories are methodologically compatible with granular, comparative analysis in ways that canonical philosophical works—such as *Waiting for Godot*, *The Myth of Sisyphus*, or *Fear and Trembling*—are not (Beckett, 1954; Camus, 2013; Kierkegaard, 2013). Third, unlike classical Daoist texts, *Wild Wise Weird* is written in contemporary language and is accessible across cultures, free from many historical and linguistic barriers. Indeed, the work has resonated with readers from diverse cultural backgrounds, exhibiting a form of narrative timelessness comparable to *Animal Farm* or the satirical writings of Aziz Nesin (Nguyen, Sari, et al., 2025).

Most importantly, in an era of heightened uncertainty—intensified by widening inequality, recurrent market failures, AI-driven socio-economic disruptions, rising political polarization and geopolitical competition, and existential threats linked to climate tipping points and the transgression of planetary boundaries—engaging with philosophical works that illuminate the ongoing absurdities in how humans treat one another and the Earth becomes critically important. Understanding philosophical models that expose these structural absurdities

can generate valuable insights for decision-making processes that seek to avoid further exacerbating uncertainty and deepening systemic contradictions (Nguyen, 2024; Tran, 2025). As Dai and Duflo (2026) suggest, social commentary and literature—such as *Wild Wise Weird*, with its Nature Quotient—can serve as “an effective way to bridge the gap between awareness and sustained behavioral change,” insofar as they “encourage emotional and cognitive involvement with ecological issues.” Such engagement moves sustainability beyond abstract concern and toward embodied, culturally internalized responsibility.

Methodology

Theoretical Foundation

This study employs the Granular Interaction Thinking Theory (GITT) to conceptualize uncertainty and absurdity as emergent outcomes of information interactions and to explain how these outcomes dynamically reinforce one another (Vuong, La, & Nguyen, 2025; Vuong & Nguyen, 2024). As a core analytical component of the Kingfisherish worldview, GITT offers a clear information-processing perspective for interpreting how uncertainty and absurdity are embedded within *Wild Wise Weird*. Integrating insights from quantum mechanics, Shannon’s information theory, and mindsponge theory (Rovelli, 2018; Shannon, 1948), GITT models cognition and society as probabilistic, finite, and energy-constrained information-processing systems.

GITT conceptualizes all living and social systems as “minds” in a broad sense—entities capable of collecting, evaluating, organizing, filtering, and processing information. These minds include individuals, groups, institutions, and societies. The environment refers to the broader information-processing context in which these minds are embedded, encompassing social relations, ecological systems, cultural norms, technological infrastructures, and digital media environments.

As minds engage with increasingly complex environments, the volume, diversity, and velocity of information they encounter expand. This expansion elevates informational entropy, conceptualized here as uncertainty or the expected degree of “surprise” associated with possible outcomes. Within GITT, informational entropy is formally represented using Shannon’s entropy function (Shannon, 1948):

$$H(X) = - \sum_{i=1}^n P(x_i) \log_2 P(x_i)$$

where $H(X)$ denotes the entropy of a random variable X with possible outcomes $\{x_1, x_2, \dots, x_n\}$ and corresponding probabilities $\{P(x_1), P(x_2), \dots, P(x_n)\}$. Entropy increases

as informational inputs accumulate without sufficient differentiation, prioritization, or interpretive structure, and reaches its maximum when all outcomes are equally weighted

$$P(x_i) = \frac{1}{n}.$$

Because reality is granular and all cognitive systems operate under finite energetic and processing constraints, minds cannot retain or process all available information (Rovelli, 2018). Consequently, they must continuously evaluate, filter, rank, and discard information, assigning higher subjective probabilities to informational units perceived as valuable for survival, growth, or reproduction. Drawing on the quantum principle of relationality, GITT also assumes that informational meaning and value do not exist intrinsically but emerge through interaction. Accordingly, the properties of any informational unit—beliefs, facts, narratives, or symbols—are defined only in relation to other informational units within the system. Through continuous interaction with their environments, minds must reorganize their internal informational structures to maintain coherence, functionality, and survival. From this perspective, successful adaptation in a dynamic environment depends on how effectively information is acquired, retained, transmitted, and processed. This view aligns with Darwinian evolutionary theory (Darwin, 1964; Darwin & Wallace, 1858), which emphasizes adaptability—rather than raw strength or intelligence—as the primary determinant of survival.

However, this process is inherently selective and optimizing, yet structurally imperfect, as it is shaped by bounded sensory access, limited memory, and preexisting knowledge, value systems. As a result, the mind's internal informational structure may deviate from reality, rendering it the source of uncertainty (Nguyen, Le, & Vuong, 2023).

Within GITT, uncertainty can be classified into two types based on the mind's degree of controllability: partial uncertainty and complete uncertainty. Partial uncertainty refers to information interactions that generate limited deviations from established cognitive patterns. Such deviations introduce manageable surprise and a temporary rise in entropy, prompting selective reweighting or reprioritization of information without destabilizing overall information-processing capacity. In contrast, complete uncertainty arises when information interactions produce large and compounding deviations from expected cognitive patterns. In this state, surprise becomes persistent and escalating, and entropy rises beyond the mind's capacity to stabilize beliefs or update its internal model of reality.

Following Daoist and Kingfisherish philosophy, heightened entropy can be reduced by lowering surprise, adjusting expectations, and accepting uncertainty as an inherent condition of existence, rather than attempting to suppress it through domination or power accumulation—that is, through the capacity to impose, accelerate, or obstruct change (Green, 1998). Metaphorically, this orientation reflects a Kingfisherish wandering mode of

engagement (Nguyen, 2025b): calm, adaptive, and non-obsessive interaction with the world. In contrast, systems that actively pursue novelty and surprise, inflate expectations, and reject uncertainty as intolerable tend to enforce order through control, domination, and power accumulation. Although such strategies may temporarily sustain a low-entropy state, they are inherently unstable. Because the system continues to interact with a changing environment, low-entropy states built upon distorted or illusory beliefs, convictions, or prejudices are prone to sudden collapse, often triggering rapid and escalating entropy (Nguyen, Ho, et al., 2025).

From this perspective, uncertainty can give rise to absurdity when new information cannot be coherently integrated into existing systems of reasoning. When incoming information aligns with the broader order of reality yet contradicts the mind's established cognitive frameworks, it appears as surprise information. If the mind lacks sufficient flexibility or energetic capacity to reorganize its internal structure, the information is experienced not merely as uncertain, but as absurd—that is, as incompatible with prevailing categories of meaning and justification.

In GITT, absurdity denotes information that exceeds or disrupts the system's existing interpretive order. Once information is classified as absurd, it is no longer compatible with the interpretive rules. Consequently, the probability distribution that underpins reasoning becomes highly chaotic, undermining knowledge's entropy-reducing function. Entropy, therefore, increases further, creating conditions for escalating absurdity. Under partial uncertainty, the resulting absurdity is typically small in scale—localized, episodic, and potentially reversible through cognitive adjustment. Under complete uncertainty, however, absurdity becomes large-scale, persistent, and system-destabilizing, as reasoning frameworks fail to navigate. Moreover, when small absurdities accumulate or remain unresolved, they can erode interpretive stability over time, increasing the system's vulnerability to larger breakdowns and thus bigger absurdities.

Based on this reasoning, we propose the following hypotheses:

H1: Partial uncertainty is positively associated with small absurdity.

H2: Complete uncertainty is positively associated with big absurdity.

H3: Small absurdity is positively associated with big absurdity.

Importantly, uncertainty and absurdity are not driven solely by environmental complexity but can be endogenously amplified by human information-processing behaviors that generate misinformation, defined as information that deviates from reality. Within *Wild Wise Weird*, three primary misinformation production modes are identified:

- Lying: the intentional introduction of false information to induce incorrect belief updating.
- Sophistry: the strategic manipulation of information—through selective framing, half-truth, fallacious reasoning, or rhetorical distortion—to achieve instrumental goals rather than improve understanding.
- Speculation: the production of plausible yet weakly grounded information that extends beyond available evidence through unsupported inference or extrapolation.

These modes distort probability assignments within informational systems, flattening or skewing distributions in ways that intensify uncertainty and entropy. When misinformation is present, complete uncertainty can be more likely to translate into big absurdity, as distorted inputs prevent effective formulation of knowledge. Similarly, misinformation can transform small absurdity—which might otherwise remain localized—into big absurdity by reinforcing misinterpretation, legitimizing incoherence, or obstructing corrective updating. Accordingly, we propose:

H4: The association between complete uncertainty and big absurdity is moderated by misinformation production modes.

H5: The association between small absurdity and big absurdity is moderated by misinformation production modes.

Data collection and variables

Wild Wise Weird is structured as a collection of 48 short, self-contained stories in the form of satirical fables. These narratives blend traditional storytelling with modern sensibilities, interweaving humor, life lessons, and social commentary. The book represents a central expression of Kingfisherish philosophy, which shows strong resonance with Daoist thought—particularly Zhuangzi’s *Nanhuajing*. The term “Kingfisherish” itself originates from the protagonist Kingfisher in *Wild Wise Weird*. The philosophy articulated in *Wild Wise Weird* is among the few contemporary works that can keep moving along with Zhuangzi’s spirit of *wu-wei* (無為): allowing thought and imagination to flow naturally, adapting to circumstances rather than forcing outcomes (Liu, 2024). This great alignment is clearly reflected in [Kingfisherish Wandering](#), which explores Zhuangzi’s philosophy through imagined wandering conversations between Kingfisher and Zhuangzi (Nguyen, 2025b).

In this study, we examine whether absurdity in *Wild Wise Weird* emerges through interactions between uncertainty and different modes of misinformation production. To this end, we constructed a dataset based on the full set of 48 stories in the book.

Variables representing uncertainty, absurdity, and modes of misinformation production were identified through close reading of the stories, guided by the GITT-based formulations introduced in the Theoretical Foundation section. Importantly, because absurdity is conceptualized as an emergent outcome of interactions between information processed within the mind and information originating from the surrounding environment—including other minds—coding was not limited to the information-processing of a single character. Instead, each story was evaluated based on the collective information-processing dynamics among all associated characters.

The coding scheme consisted of the following categories:

- Partial uncertainty was coded when a story contained indications of increased informational entropy that remained manageable or controllable within the collective information-processing system. Examples include emerging desires, increasing difficulty in obtaining food, growing but manageable confusion within a group, unexpected news, or environmental changes (e.g., reports of a hotter Earth affecting the bird village).
- Complete uncertainty was coded when a story depicted informational entropy that overwhelmed or exceeded the capacity of associated characters to manage or control it. Examples include total frustration, uncontrollable surprise, overwhelming anxiety, struggles without discernible solutions, or inexplicable phenomena.
- Small absurdity was coded when a story exhibited contradictions or misalignments between processed information and reality, goals, priorities, or value systems, while information-processing nevertheless continued to function. Examples include seeking health advice from an unqualified character, privileging nonsense philosophizing by elders, disorder producing better outcomes than discipline, or weight gain despite eating less.
- Big absurdity was coded when such contradictions or misalignments rendered information-processing uncontrollable or caused it to break down entirely. For example, attempts to abstain from eating fish in pursuit of better health lead to a near-death experience that is only resolved by eating fish; reports are portrayed as completely honest, trustworthy, and ethical despite being based on fabricated data and falsified measurements; or efforts to establish peace without mortality paradoxically escalate into larger wars with substantial loss of life.
- Lying was coded when a story involved the intentional introduction of false information into circulation, such as explicit falsehoods presented as truth, characters acting on factually incorrect information, or claims later contradicted by observable events.

- Sophistry was coded when information was strategically manipulated to achieve a specific objective rather than to improve understanding. Examples include a bird organizing a committee composed entirely of subordinates to manufacture accolades for himself, offering justifications that appear logically coherent yet lack realism, or engaging in selective storytelling.
- Speculation was coded when a story featured the production of plausible but weakly grounded information, such as extrapolations beyond available evidence, unsupported inference, or the application of prior knowledge to reason or make decision about an entirely novel thing.

A Google Forms questionnaire was designed to record the presence of these characteristics, along with brief textual descriptions supporting each coding decision. Each story was systematically evaluated using this instrument. If a characteristic was present, it was coded as 1; otherwise, it was coded as 0. All coding and data entry were conducted by the author. Upon completion of the initial coding, entries were reviewed to ensure internal consistency and reliability.

This process resulted in seven variables used in the present study: *PartialUncertainty*, *CompleteUncertainty*, *SmallAbsurdity*, *BigAbsurdity*, *Lie*, *Sophistry*, and *Speculation*.

Model construction

To test the hypotheses formulated above, we constructed two Bayesian models. All models are specified within a logistic regression framework, where the probability of observing an outcome is modeled on the log-odds scale.

Model 1 examines the associations between partial and complete uncertainty and the emergence of small absurdity:

$$SmallAbsurdity \sim normal \left(\log \left(\frac{\mu_i}{1-\mu_i} \right), \sigma \right) \quad (1.1)$$

$$\log \left(\frac{\mu_i}{1-\mu_i} \right) = \alpha + \beta_1 * PartialUncertainty_i + \beta_2 * CompleteUncertainty_i \quad (1.2)$$

$$\beta \sim normal(M, S) \quad (1.3)$$

Here, μ_i denotes the probability that small absurdity occurs in story i . The dispersion of the outcome around the mean log-odds is governed by the standard deviation σ . The predictors *PartialUncertainty_i* and *CompleteUncertainty_i* indicate the presence of partial and complete uncertainty in story i , respectively. Regression coefficients are assigned normal prior distributions with mean M and standard deviation S .

In Models 2, the outcome variable is replaced with *BigAbsurdity*, and additional predictors and interaction terms are introduced. Model 2 presents both the linear associations between uncertainty, small absurdity, and big absurdity and their interactions with different modes of misinformation production to capture non-linear information-processing dynamics

$$BigAbsurdity \sim normal \left(\log \left(\frac{\mu_i}{1-\mu_i} \right), \sigma \right) \quad (2.1)$$

$$\begin{aligned} \log \left(\frac{\mu_i}{1-\mu_i} \right) = & \alpha + \beta_1 * PartialUncertainty_i + \beta_2 * PartialUncertainty_i * Lie_i + \beta_3 * \\ & PartialUncertainty_i * Sophistry_i + \beta_4 * PartialUncertainty_i * Speculation_i + \beta_5 * \\ & CompleteUncertainty_i + \beta_6 * CompleteUncertainty_i * Lie_i + \beta_7 * \\ & CompleteUncertainty_i * Sophistry_i + \beta_8 * CompleteUncertainty_i * Speculation_i + \beta_9 * \\ & SmallAbsurdity_i + \beta_{10} * SmallAbsurdity_i * Lie_i + \beta_{11} * SmallAbsurdity_i * \\ & Sophistry_i + \beta_{12} * SmallAbsurdity_i * Speculation_i \end{aligned} \quad (2.2)$$

$$\beta \sim normal(M, S) \quad (2.3)$$

The logical network of Model 2 is shown in Figure 1.

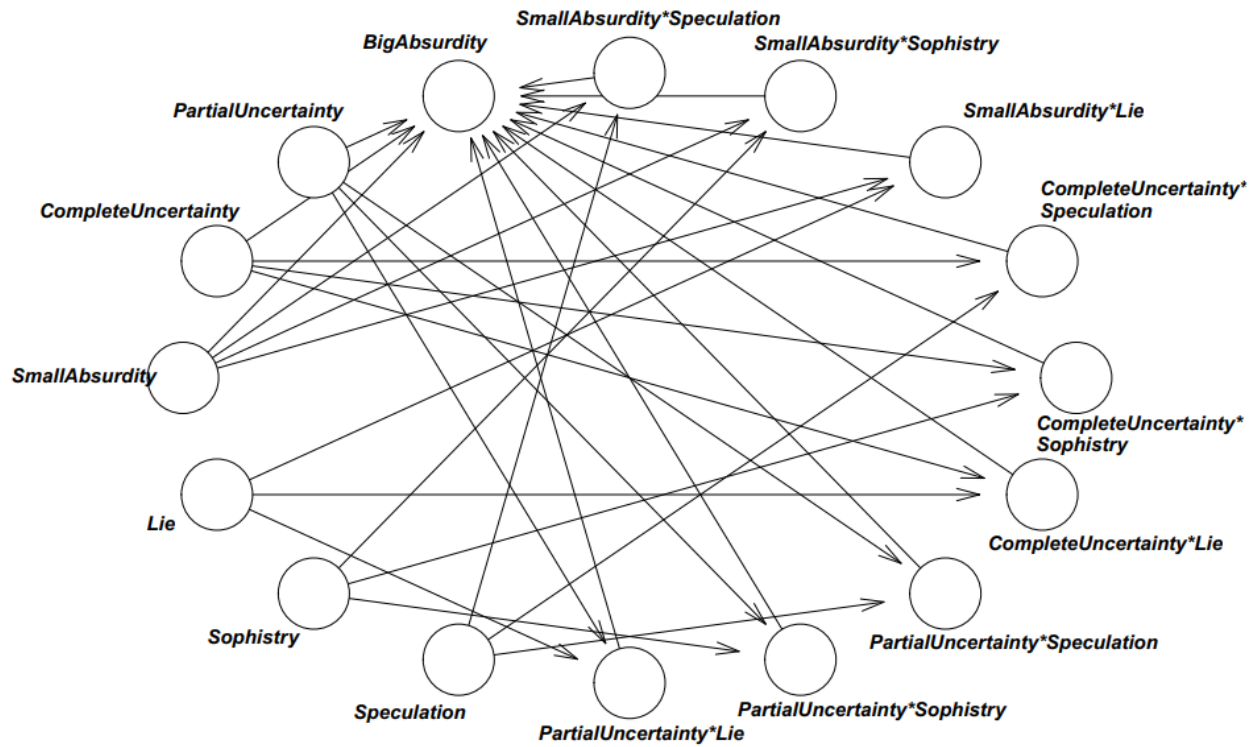


Figure 1: Model 2's logical network

Analysis and validation

This study employed Bayesian Mindsponge Framework (BMF) analytics to examine the proposed relationships under conditions of structural uncertainty and probabilistic meaning formation. BMF integrates the information-processing logic of GITT with Bayesian statistical inference, allowing cognitive and social phenomena to be modeled as emergent outcomes of interacting informational units rather than deterministic causal chains (Nguyen, La, Le, & Vuong, 2022; Vuong, Nguyen, & La, 2022). This integration is particularly appropriate for the present study, which conceptualizes uncertainty and interpretive instability not as empirical noise but as constitutive features of the phenomena under investigation.

Within GITT, cognitive and social outcomes arise from finite, energy-constrained systems that process information probabilistically. Meaning, belief updating, and experiential states are therefore expected to exhibit indeterminacy, non-linearity, and context dependence. Bayesian inference aligns naturally with this ontological stance by representing unknown parameters, latent cognitive states, and structural uncertainty as probability distributions that are updated iteratively as evidence accumulates (Gill, 2015). Rather than forcing premature certainty, Bayesian estimation preserves uncertainty as an analytically meaningful quantity.

From this perspective, Bayesian modeling provides a formal mechanism to operationalize GITT's principle of indeterminacy. It enables the estimation of how multiple informational inputs—and their interactions—jointly shape emergent cognitive or experiential states under conditions where outcomes are inherently probabilistic rather than fully predictable. This capacity is especially valuable for the present study, which examines uncertainty and absurdity.

Bayesian methods further allow for parsimonious modeling of non-linear and context-dependent interactions without relying on large-sample asymptotics or strict distributional assumptions. This is critical in high-uncertainty research contexts, where linear approximations and point-estimate reasoning risk obscuring meaningful variability or overstating explanatory precision (Bentler & Mooijaart, 1989; Cogle, 2012).

Beyond conceptual alignment, Bayesian inference offers several advantages over conventional frequentist approaches. Scholars have linked the dominance of null-hypothesis significance testing to reproducibility concerns in the social and psychological sciences (Camerer et al., 2018; Open Science Collaboration, 2015). Dichotomous interpretations of p -values can obscure uncertainty and promote overconfidence, particularly in studies involving complex cognitive or socio-informational dynamics (Halsey, Curran-Everett, Vowler, & Drummond, 2015). In contrast, Bayesian credible intervals allow direct probabilistic statements about parameter values, conditional on the observed data

and model assumptions. A 95% credible interval represents the range within which a parameter lies with 95% posterior probability, an interpretation that is highly appropriate for research in which uncertainty, subjectivity, and contextual variability are intrinsic rather than problematic (van Zyl, 2018; Wagenmakers et al., 2018).

Prior specification and robustness checks

Prior specification is a central component of Bayesian inference and is treated here not as a source of arbitrariness, but as a transparent and theoretically grounded modeling choice (Vuong et al., 2020). In small-sample settings, appropriately constructed informative priors can enhance the stability, predictability, and precision of Bayesian models (Van De Schoot, Broere, Perryck, Zondervan-Zwijnenburg, & Van Loey, 2015). Multicollinearity among predictors—common in information-rich social environments—creates a “weak data” condition in which likelihood-based estimation alone may produce unstable or weakly identified parameter estimates (Leamer, 1973). From a Bayesian perspective, such instability manifests as diffuse or highly overlapping posterior distributions.

To address this issue while minimizing undue subjectivity, the primary analyses employed two sets of informative priors: one reflecting expectations derived from the GITT-based theoretical reasoning outlined above (i.e., normal distributions with mean being 1 and standard deviation being 1), and another expressing skepticism toward the hypothesized associations (i.e., normal distributions with mean being 0 and standard deviation being 1). Convergence and consistency of posterior estimates across these alternative prior specifications were interpreted as evidence of robustness to both multicollinearity and reasonable prior perturbations.

Model diagnostics

Model adequacy was assessed using Pareto-smoothed importance sampling leave-one-out cross-validation (PSIS-LOO) (Vehtari & Gabry, 2024; Vehtari, Gelman, Gabry, & computing, 2017). The LOO was estimated using the formula below:

$$LOO = -2LPPD_{loo} = -2 \sum_{i=1}^n \log \int p(y_i|\theta) p_{post(-i)}(\theta) d\theta$$

PSIS-LOO evaluates out-of-sample predictive accuracy while providing Pareto k diagnostics to identify influential observations. Values of k below 0.5 indicate reliable approximations, while values below 0.7 are generally considered acceptable.

Markov chain convergence was evaluated using both numerical and graphical diagnostics. Effective sample size (n_{eff}) values exceeding 1,000 were taken as evidence of adequate sampling efficiency, while Gelman–Rubin statistics (R_{hat}) approaching 1.00 indicated satisfactory chain mixing (Brooks & Gelman, 1998; McElreath, 2018). Trace plots were

visually inspected to confirm sampling stability and convergence. To enhance the interpretability of the posterior results, we present posterior distribution plots accompanied by 95% Highest Posterior Density Intervals (HPDIs), defined as the narrowest intervals containing 95% of the posterior probability mass. We also calculated the probability of direction (pd) to estimate the posterior probability that a given parameter's effect is either positive or negative (Makowski, Ben-Shachar, Chen, & Lüdecke, 2019; Makowski, Ben-Shachar, & Lüdecke, 2019)

All Bayesian analyses were conducted in R using the bayesvl package (version 1.0.0) (La & Vuong, 2025; Vuong & La, 2025). In accordance with open-science and reproducibility principles, the full dataset and analysis scripts have been publicly archived on Zenodo, enabling independent verification, replication, and reuse by other researchers: <https://zenodo.org/records/18616436>.

Results

Model Fit and Convergence Diagnostics

All models were estimated using R version 4.5.2 (“[Not] Part in a Rumble”) on the x86_64-mingw32/x64 platform. The MCMC simulations were run with four Markov chains, each consisting of 5,000 iterations, of which the first 2,000 were allocated to warm-up (burn-in). Parallel computation was implemented using four cores.

PSIS-LOO diagnostics were first conducted to assess the model fit of Models 1 and 2. As shown in Figure 2, all Pareto k diagnostic values fall below the 0.7 threshold, indicating an acceptable correspondence between Model 1 and the observed data. Similarly, Figure 3 shows that all k-values for Model 2 are below 0.7, confirming acceptable model fit.

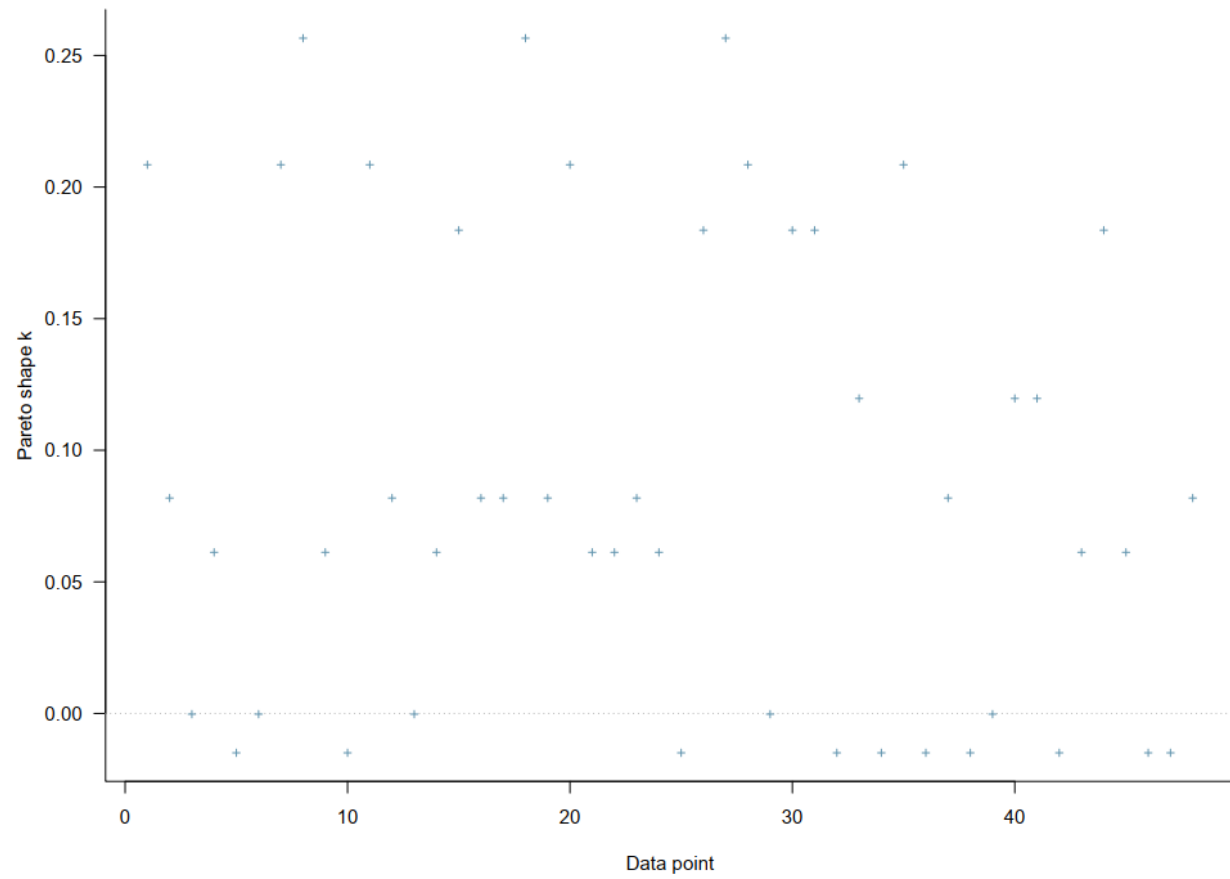


Figure 2: Model 1's PSIS-LOO test estimated using informative priors based on GITT-reasoning

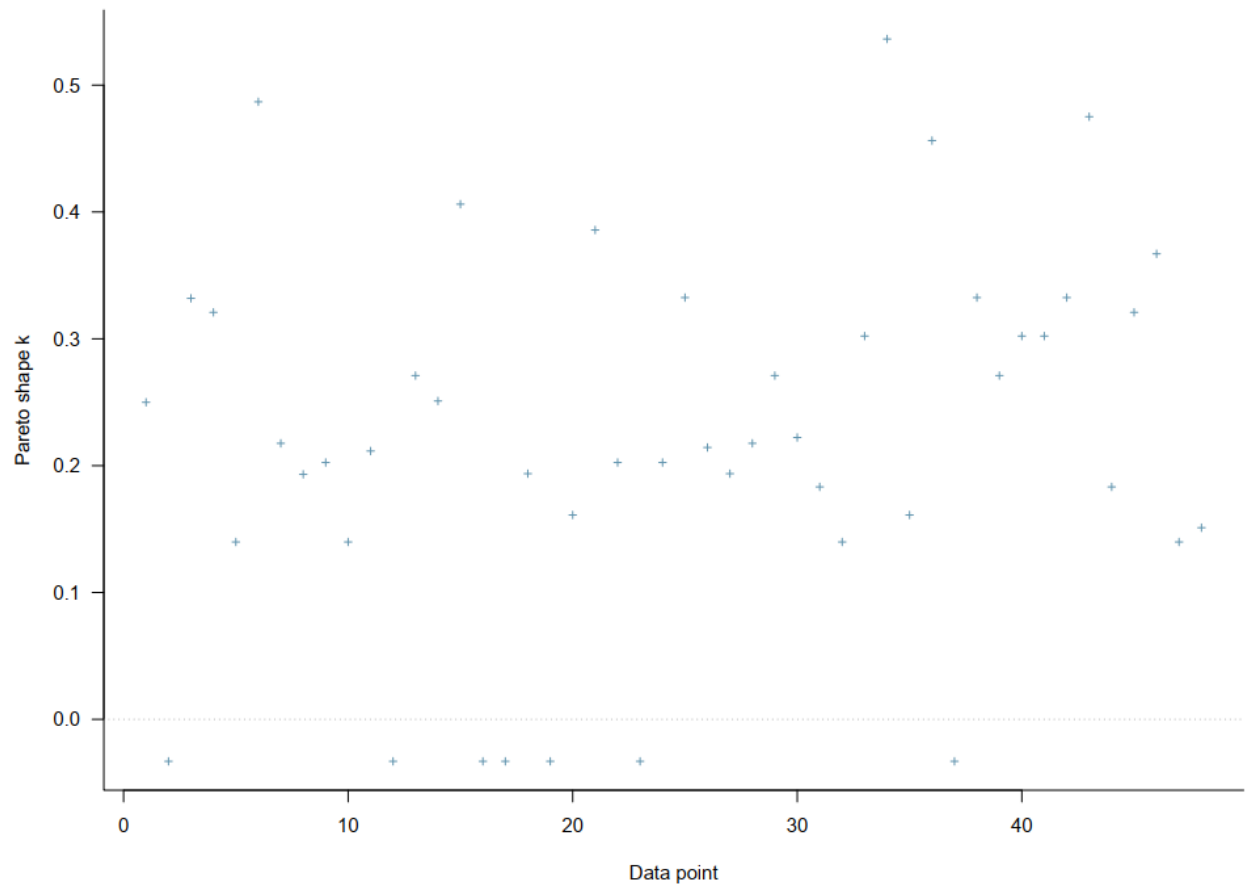


Figure 3: Model 2’s PSIS-LOO test estimated using informative priors based on GITT-reasoning

Posterior summaries for Models 1 and 2—including posterior means, standard deviations, n_{eff} , and $Rhat$ —under both informative prior specifications (i.e., GITT-consistent priors and skeptical priors) are reported in Tables 1 and 2, respectively. All parameters exhibit $Rhat = 1.00$, indicating good convergence, and all n_{eff} values exceed 1,000, demonstrating efficient chain mixing and stable posterior estimation.

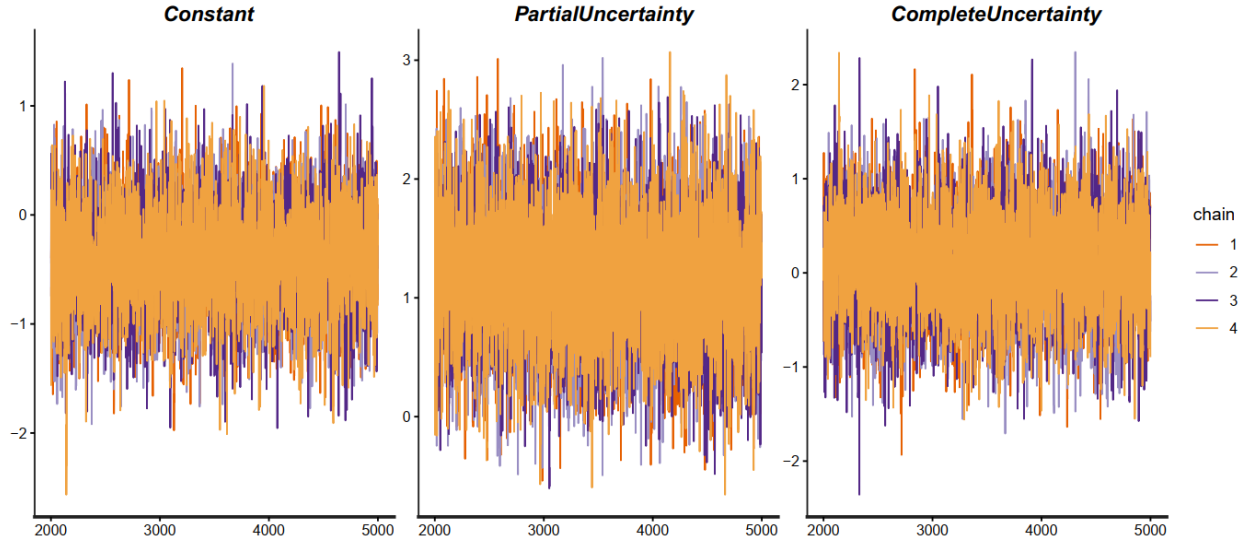


Figure 4: Model 1's trace plots estimated using informative priors based on GITT-reasoning

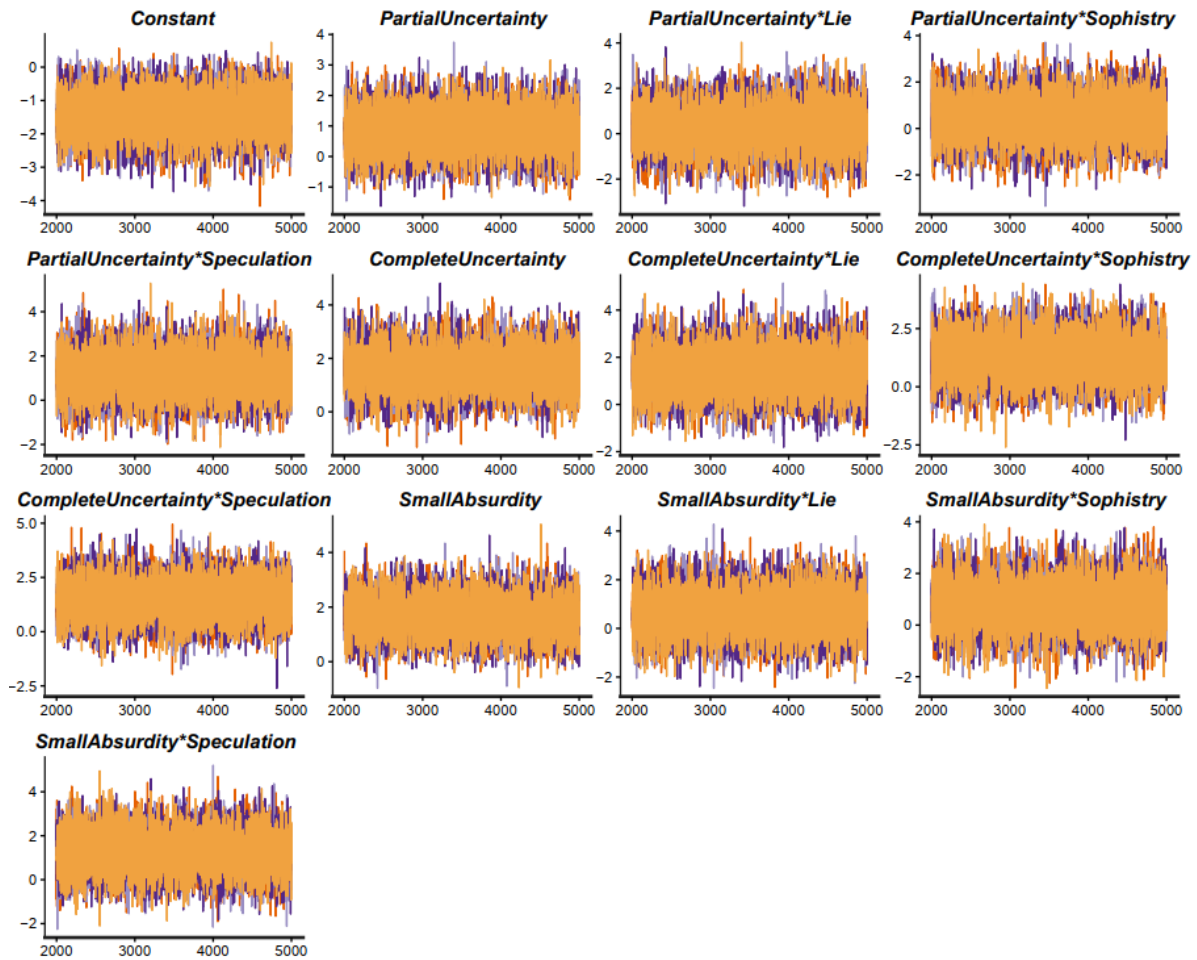


Figure 5: Model 2's trace plots estimated using informative priors based on GITT-reasoning

Trace plots for Models 1 and 2 are presented in Figures 4 and 5. These plots display sampled parameter values across successive MCMC iterations, with the y-axis representing coefficient values and the x-axis indicating iteration number. The chains exhibit good mixing behavior and stationarity around a stable equilibrium, further confirming convergence of the Markov chains for both models. As a result, the estimations are eligible for interpretation.

Posterior Distributions

The posterior distributions of Model 1 estimated using informative priors derived from GITT-based reasoning indicate that partial uncertainty is positively associated with small absurdity ($M_{PartialUncertainty} = 1.17$ and $S_{PartialUncertainty} = 0.54$), whereas complete uncertainty exhibits an ambiguous relationship ($M_{CompleteUncertainty} = 0.11$ and $S_{CompleteUncertainty} = 0.54$). The 95% HPDI (i.e., the bold blue line) for *PartialUncertainty* (see Figure 6) lies entirely above zero, indicating a highly reliable positive association. The corresponding probability of direction (pd = 98.61%) further reinforces the robustness of this effect.

Estimations using informative priors reflecting skepticism yield a similar pattern, with the direction of the association remaining positive. This consistency across theoretically supportive and skeptical prior specifications suggests that the observed relationship is robust to against multicollinearity and prior-tweaking.

Table 1: Model 1’s estimated posterior distributions

Parameters	Informative priors based on GITT-reasoning					Informative priors reflecting disbeliefs				
	M	SD	pd	n_eff	Rhat	M	SD	pd	n_eff	Rhat
<i>Constant</i>	-0.40	0.46	80.31%	6504	1	-0.16	0.46	63.53%	6280	1
<i>PartialUncertainty</i>	1.17	0.54	98.61%	7298	1	0.93	0.53	96.15%	6903	1
<i>CompleteUncertainty</i>	0.11	0.54	58.15%	7688	1	-0.14	0.53	60.02%	6935	1

** Note: M is mean; SD is standard deviation; pd is probability of direction*

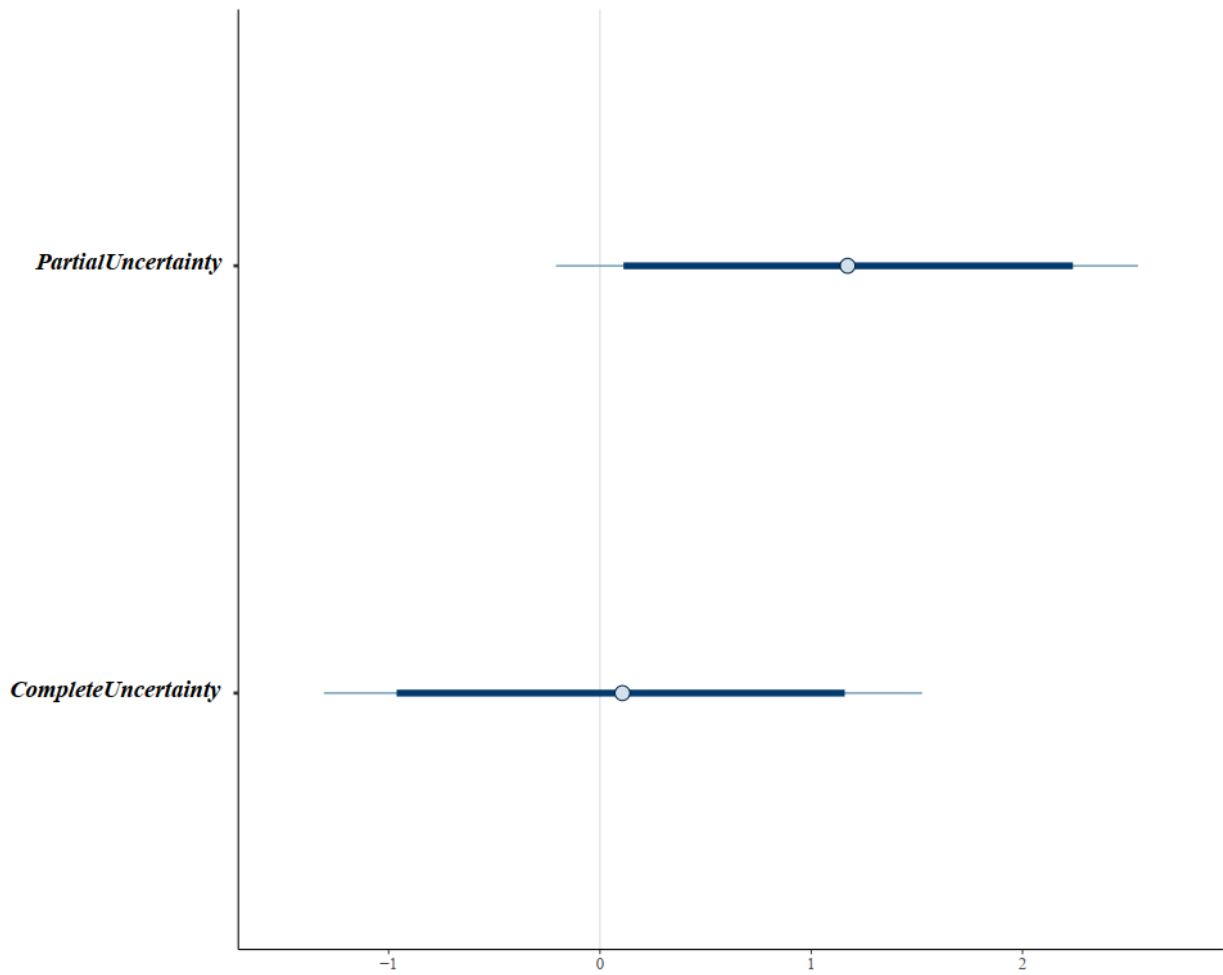


Figure 6: Model 1's posterior distributions estimated using informative priors based on GITT-reasoning

Table 2: Model 2's estimated posterior distributions

Parameters	Informative priors based on GITT-reasoning					Informative priors reflecting disbeliefs				
	M	SD	pd	n_eff	Rhat	M	SD	pd	n_eff	Rhat
<i>Constant</i>	-1.40	0.63	98.97%	9984	1	-0.76	0.59	90.98%	10652	1
<i>PartialUncertainty</i>	0.84	0.68	88.61%	14522	1	0.56	0.66	80.54%	11236	1
<i>PartialUncertainty*</i> <i>Lie</i>	0.27	0.93	61.19%	15632	1	-0.15	0.89	57.03%	12157	1

<i>PartialUncertainty*</i> <i>Sophistry</i>	0.41	0.91	67.07%	15244	1	0.04	0.87	52.58%	13325	1
<i>PartialUncertainty*</i> <i>Speculation</i>	1.18	0.96	88.92%	19658	1	0.47	0.89	70.42%	13022	1
<i>CompleteUncertainty</i>	1.56	0.77	98.01%	14221	1	1.29	0.74	96.34%	13328	1
<i>CompleteUncertainty*</i> <i>Lie</i>	1.37	0.92	92.97%	16632	1	0.83	0.85	83.29%	14832	1
<i>CompleteUncertainty*</i> <i>Sophistry</i>	1.28	0.93	92.20%	16985	1	0.70	0.87	78.33%	13523	1
<i>CompleteUncertainty*</i> <i>Speculation</i>	1.48	0.89	95.24%	16395	1	0.88	0.85	85.01%	13362	1
<i>SmallAbsurdity</i>	1.70	0.70	99.49%	12458	1	1.37	0.68	98.13%	11125	1
<i>SmallAbsurdity*</i> <i>Lie</i>	0.65	0.89	76.90%	15556	1	0.26	0.85	61.69%	12841	1
<i>SmallAbsurdity*</i> <i>Sophistry</i>	0.79	0.88	81.39%	15004	1	0.46	0.85	70.76%	12008	1
<i>SmallAbsurdity*</i> <i>Speculation</i>	1.23	0.94	90.31%	16357	1	0.39	0.90	66.42%	15788	1
* <u>Note:</u> <i>M</i> is mean; <i>SD</i> is standard deviation; <i>pd</i> is probability of direction										

The posterior distributions of Model 2, estimated using informative priors grounded in GITT-based reasoning, indicate that *PartialUncertainty* and its interaction with *Speculation* are positively associated with *BigAbsurdity* ($M_{PartialUncertainty} = 0.84$ and $S_{PartialUncertainty} = 0.68$; $M_{PartialUncertainty*Speculation} = 1.18$ and $S_{PartialUncertainty*Speculation} = 0.96$). Although Figure 7 shows that small portions of their 95% HPDIs extend into the negative region, the posterior means exceed their corresponding standard deviations. Accordingly, these effects can be considered moderately reliable, with posterior probabilities of being positive equal to 88.61% and 88.92%, respectively (see Figure 8 and Table 2).

The results further show that *CompleteUncertainty* and its interactions with three modes of misinformation production—*Lie*, *Sophistry*, and *Speculation*—are positively associated with *BigAbsurdity* ($M_{CompleteUncertainty} = 1.56$ and $S_{CompleteUncertainty} = 0.77$; $M_{CompleteUncertainty*Lie} = 1.37$ and $S_{CompleteUncertainty*Lie} = 0.72$; $M_{CompleteUncertainty*Sophistry} = 1.28$ and $S_{CompleteUncertainty*Sophistry} = 0.93$; $M_{CompleteUncertainty*Speculation} = 1.48$ and $S_{CompleteUncertainty*Speculation} = 0.89$). The 95% HPDIs for *CompleteUncertainty* and *CompleteUncertainty*Speculation* lie entirely on the positive side, indicating highly reliable positive associations. Although small portions of the HPDIs for *CompleteUncertainty*Lie* and *CompleteUncertainty*Sophistry* overlap the negative region, their posterior means remain larger than their standard deviations, with probabilities of being positive equal to 92.97% and 92.20%, respectively. These findings suggest moderately reliable positive effects.

Meanwhile, *SmallAbsurdity* is strongly and positively associated with *BigAbsurdity* ($M_{SmallAbsurdity} = 1.70$ and $S_{SmallAbsurdity} = 0.70$), with its 95% HPDI located entirely in the positive region, indicating high reliability. All three misinformation modes positively moderate the association between *SmallAbsurdity* and *BigAbsurdity*. However, only the moderation effect of *Speculation* reaches moderate reliability (90.31% probability of being positive), whereas the reliability of the other moderation effects is weak.

When Model 2 is re-estimated using skeptical informative priors, nearly all positive associations remain similar. However, several previously moderately reliable effects become ambiguous, including *PartialUncertainty*, *PartialUncertainty*Speculation*, *CompleteUncertainty*Sophistry*, and *SmallAbsurdity*Speculation*. Given the small-sample setting—where prior assumptions exert relatively strong influence on posterior estimates—this pattern suggests that these associations are theoretically plausible but do not fully overcome skeptical assumptions. In contrast, the positive effects of *CompleteUncertainty*, *CompleteUncertainty*Lie*, *CompleteUncertainty*Speculation*, and *SmallAbsurdity* on *BigAbsurdity* remain robust under skeptical priors, indicating stronger empirical support.

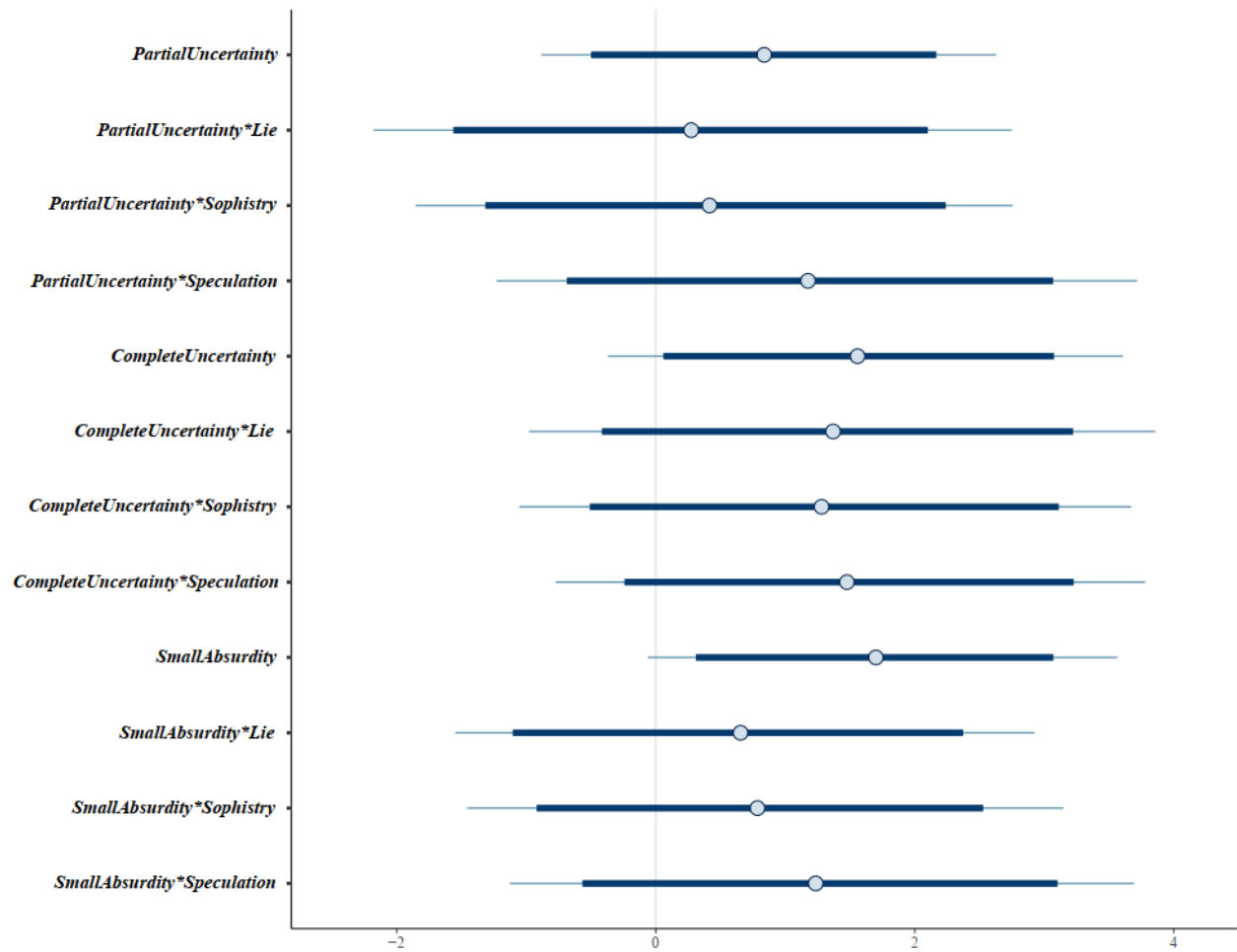


Figure 7: Model 2's posterior distributions estimated using informative priors based on GITT-reasoning

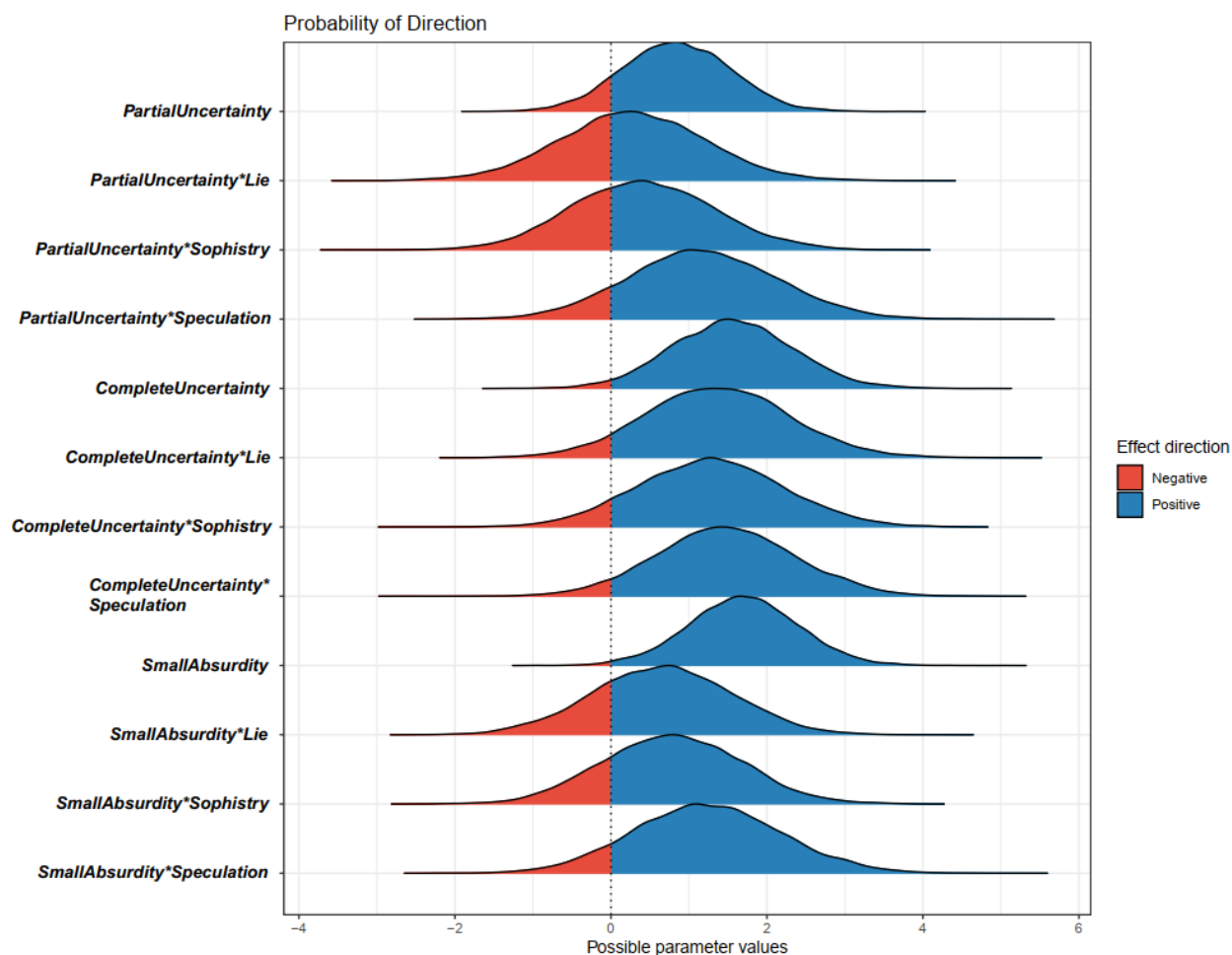


Figure 8: Probability of direction of Model 2's coefficients estimated using informative priors based on GITT-reasoning

A representative narrative illustrating the positive association between *CompleteUncertainty*, its positive moderation by *Lie* and *Speculation*, and the emergence of *BigAbsurdity* is “BOGEYMAN.” In the story, birds gradually cease to fear a traditional bogeyman, prompting humans to introduce robots equipped with new and potentially threatening technologies to guard the fields. Several scouts are sent to investigate. However, from a distance, they fabricate exaggerated claims, reporting that the robots use “all types of firearms, capable of killing targets within a 50 meter distance,” “jump really high and grow very big at will”. These misrepresentations amplify collective fear and generate complete uncertainty within Bird Village, leading the birds to seek external consultation from the rats.

The final investigation report concludes:

“Upon conducting field research, which includes climbing onto the robots to check, we reach the following conclusion:

1. The robots have state-of-the-art technology capable of chasing birds away.

2. All of the information you seek verification is wrong. Your scouts are likely too scared to come closer; thus, make poor speculations from their 200-meter distance on what the robots can do.
3. The robots are sophisticated, but since being put in the fields, their batteries are not yet installed.”

This episode reveals a case of big absurdity: the entire village constructs an image of a hyper-advanced and deadly mechanical robot, ones that have no “batteries”. In reality, exaggerated speculation and fabricated claims—produced under conditions of complete uncertainty—generate a collectively distorted belief system that continue reinforce the fear.

Moreover, another typical narrative illustrating the positive association between *SmallAbsurdity* and *BigAbsurdity* is “CONDUCTOR.” The story begins with Kingfisher admiring the vibrancy and purity of birdsong and deciding to organize a disciplined orchestra rather than the “disorderly and undisciplined” singing that naturally occurs. Initially, a small absurdity emerges: “At the beginning of rehearsal, the orchestra is a total mess [...] the songs are all good as long as they sing!” Paradoxically, as rehearsals become increasingly structured and disciplined, the quality of singing deteriorates.

Seeking advice from wise Owl, Kingfisher learns that the fundamental problem lies with himself: Kingfisher “wasn’t born with a singing voice and lacks a proper understanding of music theory! If Kingfisher stops being the conductor, the orchestra will surely play well again.” Faced with this paradox, Kingfisher responds: “My dear advisor, what else can I do if not conducting?!”

Here, a seemingly minor absurdity—overregulation of spontaneous singing—escalates into a deeper structural absurdity: the persistence of authority despite its incompatibility with the very function it seeks to optimize. This narrative exemplifies how small distortions in informational structure can accumulate and crystallize into systemic absurdity.

Discussion

Employing Bayesian Mindsponge Framework analytics, the current study provides a quantitative examination of the philosophical propositions embedded in Wild Wise Weird. By coding and analyzing manifestations of uncertainty and absurdity across 48 stories, we identify several key findings.

First, both complete uncertainty and small absurdity emerge as reliable predictors of big absurdity. This result offers empirical support for reasoning grounded in GITT. Specifically, when complete uncertainty occurs, the cognitive system becomes more susceptible to large-scale, persistent, and potentially system-destabilizing forms of absurdity. At the same

time, small absurdities—though seemingly minor and localized—can gradually erode interpretive stability, improving the probability that big absurdity will occur.

Moreover, the analysis indicates that the relationship between complete uncertainty and big absurdity is significantly amplified by misinformation, particularly lying and speculation. These modes of misinformation production generate illusory information and distort probability assignments within the informational system, thereby increasing cognitive entropy beyond what environmental complexity alone would produce. Under such conditions, uncertainty does not merely accumulate; it restructures the interpretive apparatus itself. When this distorted apparatus guides decision-making and behavior, it becomes misaligned with reality—or, with the Dao—creating fertile ground for the emergence of absurdity in ongoing interaction with the world (Del Vicario et al., 2016; Nguyen, 2025a; Treen, Williams, & O'Neill, 2020; Vraga & Bode, 2020).

Wild Wise Weird suggests that when uncertainty and absurdity interact, they can generate a self-reinforcing spiral. Escalating uncertainty weakens cognitive coherence, while emerging absurdity further destabilizes interpretive frameworks. Crucially, the mind does not always respond to rising uncertainty through adaptive recalibration. Instead, it may attempt to restore stability by intensifying control, rigidifying interpretive structures, or amplifying misinformation. From a GITT perspective, such reactions distort internal cognitive models and artificially suppress entropy rather than updating mental representations to better align with reality. This produces temporary stability at the cost of long-term fragility.

As interactions with the surrounding environment continue, decisions and behaviors driven by a distorted and misaligned cognitive system further deepen the gap between internal models and external reality. When suppressed entropy resurfaces, it reappears as intensified uncertainty and larger absurdities. Within this dynamic pathway, partial uncertainty generates small absurdity; small absurdity contributes to complete uncertainty; and complete uncertainty culminates in big absurdity. If left uncorrected, this trajectory can push cognitive and social systems beyond their finite information-processing capacities, potentially leading to systemic breakdown or collapse.

However, the interaction between uncertainty and absurdity does not inevitably lead to escalating entropy and accumulating contradictions. From a Daoist and Kingfisherish perspective, moments of uncertainty and absurdity can function as epistemic signals—indicators of potential misalignment between internal cognitive structures and external reality. When such signals are recognized, the mind need not respond through rejection, suppression, or the defensive dismissal of alternative ideas, perspectives, or constructs. Instead, it can adopt a state of cognitive deceleration—a reflective pause that lowers reactive entropy and allows careful examination of the source of distortion. This reflective

stance may involve questions such as: Which prior assumption was miscalibrated? Which probability assignment was inflated? Which expectation exceeded the bounds of reality?

This orientation does not attempt to eliminate uncertainty. Rather, it reframes uncertainty as an inherent condition of existence. If a clear resolution proves unattainable, the appropriate response is not to fabricate artificial certainty but to acknowledge epistemic finitude. Such acknowledgment reflects alignment with the Dao—the natural processes that exceed any single interpretive system. This corresponds to recalibrating informational structures and updating probability distributions in light of new evidence. Entropy is not suppressed through rigidity; instead, it is managed through flexible restructuring and continuous updating. The resulting state is a sustainable low-entropy equilibrium—not because novelty disappears, but because the cognitive system remains open, adaptive, and proportionate in its expectations (Nguyen, Ho, et al., 2025).

To follow a low-entropy trajectory, compassion and humility are indispensable qualities (Nguyen, 2025a; Rovelli, 2018). Humility enables individuals to recognize the limits of their knowledge and the fallibility of their interpretive structures. It softens rigid probability assignments and prevents the artificial suppression of uncertainty. When one acknowledges that internal cognitive models may be misaligned with reality, absurdities are no longer dismissed as external anomalies but recognized as epistemic signals indicating the need for recalibration. Compassion, meanwhile, expands the boundary of the self. It reduces the impulse to defend ego-centered structures of order and encourages openness toward alternative perspectives, experiences, and informational inputs. When compassion is present, unfamiliar signals are less likely to be rejected and neglected. Instead, they are integrated into a broader relational understanding, thereby reducing unnecessary informational conflict and facilitating adaptive restructuring.

Together, humility and compassion help nurture systems thinking—and more specifically, the development of Nature Quotient (NQ) (Vuong & Nguyen, 2025). NQ reflects the capacity to perceive oneself as embedded within dynamic, interdependent informational networks. Compassion dissolves rigid self–other boundaries, while humility dissolves epistemic arrogance. In combination, they facilitate alignment with the Dao through dynamic equilibrium rather than domination or forced control. Under such conditions, what was once labeled useless, uncertain, or absurd can gradually be transformed into useful, certain, and compatible elements within a larger system of meaning. Flexner (1939)’s philosophy of “the usefulness of useless knowledge,” which guided the founding of the Institute for Advanced Study, offers a compelling example of such transformation. By creating a space dedicated to curiosity-driven inquiry, Flexner brought together some of the most brilliant minds of the twentieth century, including Albert Einstein, J. Robert Oppenheimer, Hermann Weyl, John von Neumann, Kurt Gödel, and many others. What initially appeared abstract, speculative,

or “useless” later proved foundational to major scientific and intellectual breakthroughs, exemplifying how sustained openness to uncertainty can transform seemingly impractical ideas into enduring sources of innovation and systemic advancement.

The pursuit of a low-entropy trajectory in Daoist and Kingfisherish thought depends critically on the ability to distinguish accurate information from misinformation. Without such discernment, attempts at entropy reduction may paradoxically amplify distortion. In the digital and AI-driven era, misinformation is no longer bounded by physical space or time (Bentley, 2025; Nguyen & Vuong, 2025). A single distorted claim can propagate globally within minutes. Moreover, digital misinformation is archived, algorithmically amplified, and incorporated into training datasets, allowing its distortions to be reproduced and normalized at scale. These dynamics create collateral impacts far beyond the original context of production. In such an environment, misinformation can alter collective probability assignments at scale. It may distort shared interpretive frameworks, inflate unlikely scenarios, suppress relevant evidence, and fabricate artificial coherence around false narratives. The consequence is not merely confusion but systemic entropy—an erosion of epistemic alignment between cognitive models and reality across individuals and institutions.

For this reason, science plays a foundational role in counteracting misinformation. Scientific practice institutionalizes humility and structured skepticism. Through peer review, replicability, methodological transparency, and probabilistic reasoning, science provides mechanisms for continuously recalibrating beliefs in light of evidence. It does not eliminate uncertainty; rather, it manages it through disciplined and systematic entropy-reduction processes.

The present study also highlights the metacognitive impact of *Wild Wise Weird* on readers. The stories do not merely depict absurdity; they stage it in ways that expose hidden cognitive rigidities. Absurdity emerges when stabilized systems of value and belief reveal their fragility under altered informational conditions. Through paradox, inversion, and narrative irony, the stories allow readers to observe how seemingly rational structures collapse when contextual assumptions shift. This produces metacognitive awareness: readers begin to recognize absurdity not only in fictional characters but within their own interpretive habits.

Recognizing absurdity within oneself is crucial for overcoming order-induced blindness—a condition in which historically formed systems of order (political, cultural, ideological, or personal) are treated as self-justifying and complete. As Kurt Gödel demonstrated, no sufficiently complex system can prove its own completeness. When individuals rely rigidly on inherited interpretive structures without acknowledging their limits, they detach from the fluid dynamism of the Dao. Absurdist moments in *Wild Wise Weird*, thus, function as epistemic resolutions to overcome such blindness. They expose misalignments between

internal informational structures and reality and invite updating through a *reductio ad absurdum*-like process in which unjustified beliefs and prejudices are filtered out. What remains after repeated interaction with reality approaches “justified true belief” (Nonaka, 2009; Zagzebski, 2017). When thinking and actions become aligned to reality, they converge toward *wu-wei* (non-action)—a state in which actions unfold naturally, effortlessly, and without forced intention (Liu, 2024).

The stories in *Wild Wise Weird*, therefore, can serve as conceptual models for anticipating contemporary socio-political and environmental dynamics, contributing to achieving sustainability (Dai & Duflo, 2026). For example, they illuminate the increasingly absurd ways in which humanity treats the Earth’s ecological systems—the only known planetary environment capable of generating and sustaining complex human life (Diamond, 2011; Nguyen, 2024). Similarly, real-world developments—such as economic and diplomatic uncertainties following President Donald Trump’s return to the White House—may also be examined through this analytical lens. Drawing on the narrative frameworks articulated in *Wild Wise Weird*, one may conceptually anticipate certain patterns of uncertainty and absurdity associated with his actions, as well as those generated by their broader systemic effects. However, such extrapolations remain theoretical. Further empirical research is required to determine whether the core propositions advanced in the book can be systematically and reliably applied to political dynamics.

Despite its theoretical and methodological contributions, the present study has several limitations that should be acknowledged. First, the dataset consists of 48 stories from the book, which inherently constrains sample size. Although Bayesian methods are well-suited to small-sample contexts and probabilistic reasoning, the limited number of observations increases the influence of prior specifications and restricts statistical power. While robustness checks using both GITT-consistent and skeptical priors were conducted, some interaction effects did not remain stable across specifications, indicating that certain associations should be interpreted cautiously. Furthermore, all coding decisions were conducted by a single researcher. Although systematic procedures and consistency checks were implemented, the absence of independent coders or inter-rater reliability assessment may introduce subjective bias into variable classification, particularly given the interpretive nature of constructs such as uncertainty, absurdity, and misinformation.

Second, the study analyzes fictional narratives rather than real-world behavioral data. Although *Wild Wise Weird* is treated as a structured philosophical corpus suitable for granular analysis, its narrative dynamics may not fully map onto empirical socio-political or ecological processes. The predictive applicability of the uncertainty-absurdity spiral to contemporary events therefore remains propositional rather than causally demonstrated. Future research should expand the empirical scope by applying the proposed framework to

longitudinal social data, experimental designs, cross-cultural samples, and real-world misinformation ecosystems to assess the generalizability, boundary conditions, and practical relevance of the uncertainty–absurdity dynamics identified in this study.

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